

AMENDMENTS TO CLAIMS

1. (canceled)
2. (previously presented) Method according to claim 22, characterized in that the data sets used in the automatic adjustment of the demand quantities in step b) include restrictions with respect to at least one of the production sites and the suppliers.
3. (previously presented) Method according to claim 22, wherein the updated demand quantities are determined from the adjusted demand quantities for the first period using stochastic processes and according to predefined algorithms.
4. (previously presented) Method according to claim 22, characterized in that the automatic adjustment in step b) includes a correction of the demand quantities so as to match the demand quantities to at least one of the manufacturing capacities and the supplier capacities.
5. (canceled)
6. (previously presented) Method according to claim 22, characterized in that the generating of the updated demand quantities for the predefined second time period includes evaluating daily assumptions.

7. (previously presented) Method according to claim 22, characterized in that the automatic allocation of the portion of the adjusted, updated demand quantities to the production sites includes compiling daily schedules for the production sites.

8. (previously presented) Method according to claim 6, characterized in that the automatic allocation of the portion of the adjusted, updated demand quantities to the production sites includes breaking up products specified in the daily assumptions into their modules.

9. (previously presented) Method according to claim 22, characterized in that the updated demand quantities include information about a predetermined equipment feature of the product.

10. (canceled)

11. (previously presented) Method according to claim 22, characterized in that, in step (d), the restrictions of the production sites include at least one of capacity limitations, work schedule models and permanent staffing.

12. (previously presented) Method according to claim 22, characterized in that the dealers include domestic market dealers and importers.

13. (previously presented) Method according to claim 22, characterized in that the distribution channels are subdivided into distribution sub-channels.
14. (previously presented) Method according to claim 22, characterized in that the generating of the updated demand quantities is based on at least one of quantitative evaluations of process designs, assessments of strategies, times for freezing orders, delivery times, delivery reliability, utilization of transportation means and costs.
15. (previously presented) Method according to claim 22, characterized in that, in step (c), the evaluating is performed using data obtained from databases of real systems.
16. (canceled)
17. (previously presented) Simulation system according to claim 29, characterized in that the simulation system includes interfaces to databases of real systems.
18. (currently amended) A computer Computer program product with a computer-readable storage medium for storing a program which enables a computer, after the program is loaded into memory of the computer, to execute ~~a process for simulating order processing processes for producing a product available in a plurality of versions or a plurality of selectable features, wherein the computer program product process comprises the steps:~~

- a) means for entering into a data processing device a demand forecast quantities for at least one class of the product for at least one predefined first forecast period of time, wherein the demand forecast specifies quantities specify at least one of a version and a feature of expected customer orders or dealer specifications of the product;
- b) means for automatically adjusting, through use of a computer program installed on a data processing device, the demand forecast quantities with predefined datasets representative of at least one of manufacturing capacities and supplier capacities, and determining at least one of approved firm order allocations and approved modular allocations;
- c) e) generating updated demand quantities for a predefined second forecast time period by evaluating the adjusted demand quantities for the first period and at least one of the approved firm order allocations, the approved modular allocations and simulated buyer orders newly received by dealers;
- c) d) means for adjusting the updated demand forecast quantities with respect to restrictions of at least one of production sites and suppliers, and automatically allocating at least a portion of the adjusted, updated demand forecast quantities to the production sites;
- d) e) means for simulating at least one of production and supply for the production based on the allocation in c) step d);
- e) f) means for automatically determining distribution channels and simulating distribution of the finished products from the production sites to delivery locations;

f) g) means for using the adjusted demand forecast as placeholders for new actual customer orders of a finished product and new actual dealer specifications of a finished product, wherein the new actual customer orders or new actual dealer specifications are incorporated into the order processing process by means for matching the adjusted, updated demand forecast quantities with at least one of the new an actual customer orders order of a finished product and the new an actual dealer specifications specification of a finished product, wherein the at least one of the actual customer order and the actual dealer specification is assigned to a matching, adjusted, updated demand forecast quantity not yet assigned to an actual customer order or an actual dealer specification, wherein the matching, adjusted, updated demand forecast quantity assigned to the at least one actual customer order or actual dealer specification of the finished product is converted into an individual order which completely specifies the finished product;

g) h) means for generating customized order data representative of the individual order at least the adjusted, updated demand quantities assigned to the at least one actual customer order and actual dealer specification; and

h) i) means for outputting the customized order data to the production sites.

19. (currently amended) A computer-readable Computer-readable storage medium for storing a program which enables a computer, after the program is loaded into memory of the computer, to execute a process for simulating order processing processes used for producing a product available in a plurality of versions or a plurality of selectable features, wherein the computer-readable storage medium process comprises the steps:

- a) means for entering, into a data processing device, a demand forecast quantities for at least one class of the product for at least one predefined first forecast period of time, wherein the demand forecast specifies quantities specify at least one of a version and a feature of expected customer orders or dealer specification of the product;
- b) means for automatically adjusting, through use of a computer program installed on a data processing device, the demand forecast quantities with predefined datasets representative of at least one of manufacturing capacities and supplier capacities, and determining at least one of approved firm order allocations and approved modular allocations;
- c) generating updated demand quantities for a predefined second forecast time period by evaluating the adjusted demand quantities for the first period and at least one of the approved firm order allocations, the approved modular allocations and simulated buyer orders newly received by dealers;
- d) means for adjusting the updated demand forecast quantities with respect to restrictions of at least one of production sites and suppliers, and automatically allocating at least a portion of the adjusted, updated demand forecast quantities to the production sites;
- e) means for simulating at least one of production and supply for the production based on the allocation in c)step-d};
- f) means for automatically determining distribution channels and simulating distribution of the finished products from the production sites to delivery locations;

f) g) means for using the adjusted demand forecast as placeholders for new actual customer orders of a finished product and new actual dealer specifications of a finished product, wherein the new actual customer orders or new actual dealer specifications are incorporated into the order processing process by means for matching the updated demand forecast quantities with at least one of the new ~~an~~ actual customer orders ~~order~~ and ~~the new~~ ~~an~~ actual dealer specifications ~~specification~~ of a finished product, wherein the at least one of the actual customer order and the actual dealer specification is assigned to a matching, adjusted, ~~updated~~ demand forecast quantity not yet assigned to an actual customer order or an actual dealer specification, wherein the matching, adjusted, ~~updated~~ demand forecast quantity assigned to the at least one actual customer order or actual dealer specification of the finished product is converted into an individual order which completely specifies the finished product;

g) h) means for generating customized order data representative of the individual order at least the adjusted, ~~updated~~ demand quantities assigned to the at least one ~~actual customer order and actual dealer specification~~; and

h) i) means for outputting the customized order data to the production sites.

20-21 (canceled)

22. (currently amended) A method Method for simulating order processing processes used for producing a product available in a plurality of versions or a plurality of selectable features comprising the steps:

- a) entering into a data processing device a demand forecast quantities for at least one class of the product for at least one predefined first forecast period of time, wherein the demand forecast specifies quantities specify at least one of a version and a feature of expected customer orders or dealer specifications of the product;
- b) automatically adjusting, through use of a computer program installed on a data processing device, the demand forecast quantities with predefined datasets representative of at least one of manufacturing capacities and supplier capacities, and determining ~~at least one of approved firm order allocations and approved modular allocations~~;
- c) generating updated demand quantities for a predefined second forecast time period by evaluating the adjusted demand quantities for the first period and at least one of the approved firm order allocations, the approved modular allocations and simulated buyer orders newly received by dealers;
- d) adjusting the updated demand forecast quantities with respect to restrictions of at least one of production sites and suppliers, and automatically allocating at least a portion of the adjusted, updated demand forecast quantities to the production sites;
- e) simulating at least one of production and supply for the production based on the allocation in step c)d);
- f) automatically determining distribution channels and simulating distribution of the finished products from the production sites to delivery locations;
- g) using the adjusted demand forecast as placeholders for new actual customer orders of a finished product and new actual dealer specifications of a finished

product, wherein the new actual customer orders or new actual dealer specifications are incorporated into the order processing process by matching the adjusted, updated demand forecast quantities with at least one of the new an actual customer orders order of a finished product and new an actual dealer specifications specification of a finished product, wherein the at least one of the actual customer order and the actual dealer specification is assigned to a matching, adjusted, updated demand forecast quantity not yet assigned to an actual customer order or an actual dealer specification, wherein the matching, adjusted, updated demand forecast quantity assigned to the at least one actual customer order or actual dealer specification of the finished product is converted into an individual order which completely specifies the finished product;

- g) h) generating customized order data representative of the individual order at least the adjusted, updated demand quantities assigned to the at least one actual customer order and actual dealer specification; and
- h) i) outputting the customized order data to the production sites.

23. (previously presented) Method according to claim 22, where the product is a motor vehicle.

24. (currently amended) Method according to claim 22, where the customized order data comprises freeze point data, where a freeze point is a latest possible date when a change to the at least one actual customer order and the actual dealer specification is insertable in a production process.

25. (canceled)
26. (previously presented) Method according to claim 22, wherein the first forecast time period is a year of sales and the second forecast time period is three months.
27. (previously presented) Method according to claim 14, wherein the assessments of strategies include managing disruptions.
28. (previously presented) Method according to claim 15, wherein the databases of real systems include databases of at least one of the dealers and production sites.
29. (currently amended) A simulation system for simulating order processing processes used for producing a product available in a plurality of versions or a plurality of selectable features, the system comprising:
- a forecast module, a production module, a distribution module and an assumption module under control of a computer program implemented on a computer system,
- wherein the forecast module comprises for:
- means for receiving a demand forecast quantities for at least one class of the product for at least one predefined first period of time, wherein the demand forecast specifies quantities specify at least one of a version and a feature of the product;
- means for automatically adjusting the demand quantities with predefined datasets representative of at least one of manufacturing capacities and supplier

~~capacities, and determining at least one of approved firm order allocations and approved modular allocations; and~~

~~generating updated demand quantities for a predefined second time period by evaluating the adjusted demand quantities for the first period and at least one of the approved firm order allocations, the approved modular allocations and simulated buyer orders newly received by dealers; and~~

means for adjusting the updated demand forecast quantities with respect to restrictions of at least one of production sites and suppliers, and automatically allocating at least a portion of the adjusted, updated demand forecast quantities to the production sites;

wherein the production module comprises means for simulating at least one of production and supply for the production based on the allocating performed in the forecast module;

wherein the distribution module comprises means for automatically determining distribution channels and simulating distribution of the finished products from the production sites to delivery locations; and

wherein the assumption module is for comprises:

means for using the adjusted demand forecast as placeholders for new actual customer orders of a finished product and new actual dealer specifications of a finished product, wherein the new actual customer orders or new actual dealer specifications are incorporated into the order processing process by means for matching the adjusted, updated demand forecast quantities with at least one of the new an actual customer orders order of a finished product and the new an actual dealer

specifications specification of a finished product, wherein the at least one of the actual customer order and the actual dealer specification is assigned to a matching, adjusted, updated demand forecast quantity not yet assigned to an actual customer order or an actual dealer specification, wherein the matching, adjusted, updated demand forecast quantity assigned to the at least one actual customer order or actual dealer specification of the finished product is converted into an individual order which completely specifies the finished product;

means for generating customized order data representative of the individual order at least the adjusted, updated demand quantities assigned to the at least one actual customer order and actual dealer specification; and

means for outputting the customized order data to the production sites.

30. (previously presented) Simulation system according to claim 17, wherein the databases of real systems include databases of at least one of the dealers and production sites.

31. (previously presented) The computer program product of claim 18, wherein the process for simulating order processing processes is for producing a motor vehicle.

32. (currently amended) The computer-readable storage medium of claim 19, wherein the process for simulating order processing processes is for producing a motor vehicle.

33. (previously presented) The method of claim 22, wherein the matching of step g) further comprises:

comparing the at least one of the actual customer order and the actual dealer specification, in the reverse order that the dealers receive the at least one of the actual customer order and the actual dealer specification, with the adjusted, updated demand quantities not yet assigned to an actual customer order or an actual dealer specification.

34. (new) The method of claim 22, wherein the demand forecast is updated periodically.

35. (new) The method of claim 22, wherein the adjusted demand forecast obtained in step b) is updated by:

determining at least one of approved firm order allocations and approved modular allocations,

generating an updated demand forecast for a predefined second forecast time period by evaluating the adjusted demand forecast for the first period and at least one of the approved firm order allocations, the approved modular allocations and simulated buyer orders newly received by dealers, and

performing steps c) to h) with the updated demand forecast in place of the demand forecast.